

## **405 KAR 30:410. In situ operations.**

RELATES TO: KRS 350.600

STATUTORY AUTHORITY: KRS 151.125, 224.033, 350.028, 350.050, 350.600

NECESSITY, FUNCTION, AND CONFORMITY: KRS 350.600 requires the Environmental and Public Protection Cabinet to develop administrative regulations for oil shale operations to minimize and prevent their adverse effects on the citizens and environment of the Commonwealth. This administrative regulation sets forth certain requirements for in situ operations.

Section 1. (1) In situ operations shall be planned and conducted in a manner which minimizes disturbances to the prevailing hydrologic balance by:

- (a) Avoiding discharge of fluids into holes or wells, other than those approved by the cabinet;
- (b) Injecting process recovery fluids only into geologic zones or intervals approved by the cabinet;
- (c) Avoiding annular injection between the wall of the drill hole and the casing;
- (d) Preventing discharge of process fluid into surface waters; and
- (e) Preventing radioactive gases or other hazardous gases from escaping into adjacent geologic zones.

(2) Anyone who conducts in situ operations shall submit to the cabinet a plan that ensures that all acid-forming, toxic-forming, or radioactive gases, solids, or liquids constituting a fire, health, safety, or environmental hazard and caused by the mining and recovery process are promptly treated, confined, or disposed of in a manner that prevents contamination of ground and surface waters, damage to fish, wildlife, and related environmental values, and threats to the public health and safety.

(3) Each permittee who conducts in situ operations shall prevent flow of the process recovery fluid:

- (a) Horizontally beyond the affected area identified in the permit; and
- (b) Vertically into overlaying or underlying aquifers.

(4) Each permittee who conducts in situ operations shall restore the quality of affected groundwater in the permit area and adjacent area, including groundwater above and below the production zone to a state which equals or exceeds the premining level, to ensure that the potential for use of the groundwater is not diminished.

Section 2. Anyone engaging in in situ operations shall submit a reclamation plan to the cabinet as part of the application package which meets the cabinet's approval.

Section 3. The terms of a permit for in situ operations may be modified by the cabinet at any time if it determines that more stringent measures are necessary to protect the ground or surface waters, fish, wildlife, and related environmental values, or health and safety of the public.

Section 4. Monitoring. (1) Each person who engages in in situ operations shall monitor the quality and quantity of surface and groundwater and the subsurface flow and storage characteristics as required by the cabinet to measure changes in the quantity and quality of water in surface and groundwater systems in the permit area and in the adjacent area.

(2) Air and water quality monitoring shall be conducted in accordance with monitoring programs approved by the cabinet as necessary according to appropriate federal and state air and water quality standards. (8 Ky.R. 136; eff. 3-1-1982; TAm eff. 8-9-2007; Crt eff. 7-3-2018.)